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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,040	02/01/2001	Mathias Bischoff	GR 00 P 1078 US	8362

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EXAMINER	
PHAN, HANH	
ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/775,040	BISCHOFF, MATHIAS	
	Examiner	Art Unit	
	Hanh Phan	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 20-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20 and 21* is/are allowed.

6)☒ Claim(s) *1-16 and 22-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is responsive to the RCE filed on 05/17/2005.

2. In claim 21, line 19, the phrase " a number user devices" should be changed to – a number of user devices --.

3. In claim 22, line 19, the phrase " a number user devices" should be changed to – a number of user devices --.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-In claim 22, lines 25 and 26, the phrase "**feeding wavelength division multiplex signals into a user device configured for connecting to the access node**" is not clear. How to feed wavelength division multiplex signals into a user device configured for connecting to the access node.

-In claim 23, lines 24 and 25, the phrase "**feeding wavelength division multiplex signals into a user device configured for connecting to the access**

node" is not clear. How to feed wavelength division multiplex signals into a user device configured for connecting to the access node.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-9, 11, 12, 14-16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushirozawa (US Patent No. 6,137,613) in view of Sharma et al (US Patent No. 5,717,795).

Regarding claims 1, 16 and 24, referring to Figures 3-6, Ushirozawa discloses an access node for optical networks with variable access wavelengths, comprising:

a plurality of first optical conductors (Fig. 3) each disposed to connect a respective user device (i.e., user devices such as data signal 1-H to N-H, Fig. 3);

at least one second optical conductor (Fig. 3) for connecting the access node to an optical network; and

a plurality of light sources (i.e., light sources 2-1 to 2-N, Fig. 3) emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to optical modulators 41 to 4N such that the unmodulated light signals of the light sources can be modulated

by the user devices (i.e., user devices such as data signal 1-H to N-H) (see col. 4, lines 53-67 and col. 5, lines 1-17).

Ushirozawa differs from claims 1, 16 and 24 in that he does not specifically teach the optical modulators are disposed in the user devices. Ushirozawa teaches the optical modulators 41 to 4N are disposed in the access node. However, Sharma in US Patent No. 5,717,795 teaches optical modulators are disposed in the user devices (Fig. 4, col. 5, lines 45-67 and col. 6, lines 1-36). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the optical modulators are disposed in the user devices as taught by Sharma in the system of Ushirozawa. One of ordinary skill in the art would have been motivated to do this since Sharma suggests in column 5, lines 45-67 and col. 6, lines 1-36 that using such the optical modulators are disposed in the user devices have advantage of increasing the signal quality and reducing the cost of device.

Regarding claim 2, Ushirozawa further teaches at least one second optical conductor is one of a plurality of optical conductors connecting the access node to the optical network (Fig. 3).

Regarding claims 3 and 4, the combination of Ushirozawa and Sharma teaches the light sources are lasers (Fig. 4 of Sharma).

Regarding claims 5 and 6, the combination of Ushirozawa and Sharma teaches optical coupling elements disposed between the light sources and the first optical conductors (Fig. 4 of Sharma).

Regarding claims 7 and 8, the combination of Ushirozawa and Sharma teaches a first switching matrix connected between the light sources and the first optical conductors (Fig. 3 of Ushirizawa).

Regarding claims 9 and 11, the combination of Ushirozawa and Sharma teaches a signal processing block with optical wavelength division multiplexers connected between the first optical conductors and the second optical conductors (Fig. 3 of Ushirozawa and Fig. 4 of Sharma).

Regarding claim 12, the combination of Ushirizawa and Sharma teaches the at least one additional signal processing unit is selected from the group consisting of a switching matrix, an optical switch, an optical amplifier, and an optical monitoring device (Figs. 3-6 of Ushirizawa and Fig. 4 of Sharma).

Regarding claims 14 and 15, the combination of Ushirizawa and Sharma teaches the user device comprising a circulator and a modulator to be connected to an information source (Fig. 10 of Sharma).

8. Claims 1-16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brock et al (US Patent No. 5,870,216) in view of Sharma et al (US Patent No. 5,717,795).

Regarding claims 1, 16 and 24, referring to Figures 7-12, Brock discloses an access node for optical networks with variable access wavelengths, comprising:

a plurality of first optical conductors (Fig. 7) each disposed to connect a respective user device (i.e., user devices such as RF input 1, RF input 2,..., RF input N, Fig. 7);

at least one second optical conductor (Fig. 7) for connecting the access node to an optical network; and

a plurality of light sources (i.e., light sources 122a to 122N, Fig. 7) emitting unmodulated light signals at wavelengths of the optical network and connected to the first optical conductors for feeding the unmodulated light signals to optical modulators 124a to 124N such that the unmodulated light signals of the light sources can be modulated by the user devices (i.e., user devices such as RF input 1, RF input 2,..., RF input N (see col. 9, lines 57-67 and col. 10, lines 1-52).

Brock differs from claims 1, 16 and 24 in that he does not specifically teach the optical modulators are disposed in the user devices. Brock teaches the optical modulators 41 to 4N are disposed in the access node. However, Sharma in US Patent No. 5,717,795 teaches optical modulators are disposed in the user devices (Fig. 4, col. 5, lines 45-67 and col. 6, lines 1-36). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the optical modulators are disposed in the user devices as taught by Sharma in the system of Brock. One of ordinary skill in the art would have been motivated to do this since Sharma suggests in column 5, lines 45-67 and col. 6, lines 1-36 that using such the optical modulators are disposed in the user devices have advantage of increasing the signal quality and reducing the cost of device.

Regarding claim 2, Brock further teaches at least one second optical conductor is one of a plurality of optical conductors connecting the access node to the optical network (Fig. 7).

Regarding claim 3, Brock further teaches the light sources are lasers (Fig. 7).

Regarding claim 4, Brock further teaches the light sources are laser arrays (Fig. 7).

Regarding claims 5 and 6, Brock further teaches optical coupling elements disposed between the light sources and the first optical conductors (Fig. 7).

Regarding claims 7 and 8, Brock further teaches a first switching matrix (126)(Fig. 1) connected between the light sources and the first optical conductors.

Regarding claims 9 and 11, Brock further teaches a signal processing block with optical wavelength division multiplexers connected between the first optical conductors and the second optical conductors (Fig. 9).

Regarding claims 10 and 13, Brock further teaches a signal block switching matrix disposed between the first optical conductors and the signal processing block (Figs. 9-12).

Regarding claim 12, Brock further teaches the at least one additional signal processing unit is selected from the group consisting of a switching matrix, an optical switch, an optical amplifier, and an optical monitoring device (Figs. 9-12).

Regarding claims 14 and 15, the combination of Brock and Sharma teaches the user device comprising a circulator and a modulator to be connected to an information source (Fig. 10 of Sharma).

Allowable Subject Matter

8. -Claims 20 and 21 are allowed.

-Claims 22 and 23 are allowed if the 112 rejection is overcome.

Response to Arguments

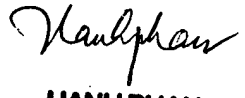
9. Applicant's arguments with respect to claims 1-16 and 20-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.



HANH PHAN
PRIMARY EXAMINER